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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,985	02/06/2004	Han-Chin Lai	2005291-0001	7089
24280	7590	07/01/2008	EXAMINER	
CHOATE, HALL & STEWART LLP TWO INTERNATIONAL PLACE BOSTON, MA 02110				HOOK, JAMES F
ART UNIT		PAPER NUMBER		
		3754		
NOTIFICATION DATE		DELIVERY MODE		
07/01/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@choate.com

Office Action Summary	Application No. 10/773,985	Applicant(s) LAI, HAN-CHIN
	Examiner James F. Hook	Art Unit 3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 6) <input type="checkbox"/> Other: _____ |
| Paper No(s)/Mail Date _____ | |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 3, 4, and 6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 7,363,944. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant applications claims are encompassed by that of the '944 patented claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 5, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Lombari (016). The reference to Lombari discloses the recited diaphragm tank comprising an outer shell 46, a flexible diaphragm 14, (as seen in figure 5A) a liner 12 which is connected to the flexible diaphragm in a sealing manner (see figure 5) to define a bladder, the liner has an orifice and a raised portion near O-ring 52, an annular groove is formed to receive the O-ring, a passage fitting 50 passes into the space between the liner and diaphragm through the orifice to provide fluidic communication, an annular holder 54 mounted on the passage fitting and having a groove the annular holder adapted to rest on the raised portion and retain the o-ring in the groove, a gasket 52 between the liner and shell, wherein a portion 60 of the neck is bent to retain the holder against the o-ring to prevent fluidic communication between the space between the liner and shell along an outer wall of the passage fitting, the passage fitting is partially inside and partially outside the shell.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lombari (016) in view of Wang. The patent to Lombari discloses all of the recited structure with the exception of providing a shoulder on the passage fitting to restrict motion of the passage fitting into the diaphragm tank. The patent to Wang discloses the recited diaphragm tank comprising an outer shell 10, a flexible diaphragm 13, (as seen in figure 5) a liner 11 which is connected to the flexible diaphragm in a sealing manner to define a bladder, the liner has an orifice near 110 and a raised portion near 111, an O-ring 23, an annular groove 112 is formed to receive the O-ring, a passage fitting 2 passes into the space between the liner and diaphragm through the orifice to provide fluidic communication, an annular holder 15 mounted on the passage fitting to contact the raised portion and retain the o-ring in the groove, a gasket 12 between the liner and shell, wherein a portion 221 of the neck is bent to retain the holder against the o-ring to prevent fluidic communication between the space between the liner and shell along an outer wall of the passage fitting, the passage fitting is partially inside and partially outside the shell and is provided with a shoulder 21 to prevent movement into the shell. It would have been obvious to one skilled in the art to provide the passage fitting in Lombari by providing a shoulder to prevent the fitting from entering more into the shell and thereby create a seal as suggested by Wang as such is an equivalent form of the passage fitting used and where such would better prevent leakage thereby preventing premature failure and saving money.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang in view of Lombari (016). The patent to Wang discloses all of the recited

structure with the exception of providing the annular holder with a groove. It would have been obvious to one skilled in the art to modify the annular holder of Wang by providing a groove as suggested by Lombari as such is an equivalent form of the holder which would provide a more secure seal with the o-ring and better prevent shifting of the o-ring which could cause premature leaks and therefore would save money by preventing premature failure.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references to Rieke, Lombari (247, and 901), Andrus, Stap, Lai, Carter, Mercier (801, 975, and 318), Kirk, Yavorsky, Lima, Mazur, and Stilwell disclosing state of the art accumulator and connection structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/
Primary Examiner, Art Unit 3754

JFH